

CURRENT LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of claims:

1 – 68 (cancelled without prejudice)

69. (currently amended) A current operation modeling method, comprising:
integrating transaction data for a commercial enterprise in accordance with a common data dictionary;
using a neural network model to identify one or more value driver candidates for each of one or more elements of value from said data,
using an induction model to identify one or more value drivers from said candidates and define a contribution summary for each element of value for each of one or more aspects of a current operation financial performance using said value drivers, and
creating a plurality of network models that connect the elements of value to aspects of current operation financial performance using said contribution summaries
where the elements of value are selected from the group consisting of brands, customers, employees, intellectual capital, partners, vendors, vendor relationships and combinations thereof,
where the induction models are selected from the group consisting of lagrange, path analysis and entropy minimization,
where a network model of an aspect of current operation financial performance is created only after removing data associated with all enterprise growth options,
where the network models support automated analysis through computational techniques and
where the aspects of current operation financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value and combinations thereof.

70. (previously presented) The method of claim 69 wherein the method further comprises using a plurality of network models of aspects of current operation financial performance to complete analyses selected from the group consisting of identifying one or more changes to one or more elements of value that will optimize one or more aspects of enterprise financial performance, identifying a net value contribution of each element of value, identifying a net

impact of element of value changes on one or more aspects of enterprise financial performance, creating one or more usable forecasts without the use of a reconciliation system, identifying one or more transaction changes that will optimize one or more aspects of financial performance and combinations thereof.

71. (previously presented) The method of claim 70 wherein a Markov Chain Monte Carlo model is used to identify the changes that will optimize one aspect of enterprise financial performance, genetic algorithms are used to identify changes that will optimize one or more aspects of enterprise financial performance or multi-criteria optimization models are used to identify the changes that will optimize two or more aspects of enterprise financial performance.

73. (previously presented) The program storage device of claim 70 wherein the analyses are calculated for a specific point in time within a sequential series of points in time.

73. (previously presented) The method of claim 69 wherein a transaction is any event that is logged or recorded.

74. (previously presented) The method of claim 69 wherein each of a plurality of network models are causal network models.

75. (previously presented) The method of claim 74 where the causal network models identify a net contribution of each element of value to the value of each aspect of current operation financial performance over time where the net contribution of each element of value to each aspect of current operation financial performance further comprises the direct element contribution net of its impact on other elements of value.

76. (previously presented) The method of claim 69 wherein the data dictionary defines attributes selected from the group consisting of account numbers, components of value, currencies, elements of value, units of measure, time periods and combinations thereof.

77. (currently amended) A program storage device readable by machine, tangibly embodying a program of instructions executable by a machine to perform method steps for performing a current operation method, the method steps comprising:

converting and integrating transaction data for a commercial enterprise by element of value in accordance with a common data dictionary;

using a sequence of analytical time series models to create a causal contribution summary for each of one or more elements of value for each of one or more aspects of current operation financial performance,

creating a plurality of network models that connect the elements of value to a value of each of one or more aspects of current operation financial performance over time using said contribution summaries,

completing analyses of one or more of the plurality of network models wherein the analyses are selected from the group consisting of identifying one or more changes to elements of value that will optimize one or more aspects of current operation financial performance, identifying a current operation value contribution of each element of value, identifying an impact of element of value changes on one or more aspects of current operation financial performance, creating one or more usable forecasts without the use of a reconciliation system, identifying one or more transaction changes that will optimize one or more aspects of financial performance and combinations thereof, and displaying the results of the analyses.

where the elements of value are selected from the group consisting of brands, customers, customer relationships, employees, employee relationships, intellectual capital, partners, vendors, vendor relationships and combinations thereof,

where a network model of an aspect of current operation financial performance is created only after removing data associated with all enterprise growth options,

where the network models support automated analysis through computational techniques, and

where the aspects of current operation financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value, raw material expense, manufacturing expense, service delivery expense, sales expense, support expense, other expense, change in cash, change in non-cash financial assets and combinations thereof.

78. (previously presented) The program storage device of claim 77 wherein the analyses are calculated for a specific point in time within a sequential series of points in time.

79. (previously presented) The program storage device of claim 77 wherein the sequence of analytical time series models further comprise a neural network model and an induction model.

80. (previously presented) The program storage device of claim 79 wherein a sequence of models complete analyses selected from the group consisting of a value driver candidate selection analysis, a value driver identification and contribution summary creation analysis, a causal component of value model development analysis and an element contribution percentage determination analysis and combinations thereof.

81. (previously presented) The program storage device of claim 77 wherein a contribution of an element of value to an aspect of current operation financial performance further comprises a total contribution of all value drivers associated with an element of value.

82. (previously presented) The program storage device of claim 81 wherein a value driver further comprises an item performance indicator selected for inclusion by an induction algorithm.

83. (previously presented) The program storage device of claim 77 wherein transaction data for a commercial enterprise are obtained from systems selected from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet and combinations thereof.

84. (previously presented) The program storage device of claim 77 wherein an element of value contribution summary further comprises a composite variable.

85. (currently amended) An optimization apparatus, comprising:
a plurality of enterprise transaction systems,
means for integrating and converting data from said systems in accordance with a common data dictionary by element of value,
means for analyzing at least a portion of said data to create a plurality of network models that identify a contribution for each of one or more elements of value to one or more aspects of current operation financial performance using said data,

means for using said models to identify one or more changes by element of value that will optimize one or more aspects of current operation financial performance, and
means for displaying the identified changes

where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value and combinations thereof,

where the network models support automated analysis through computational techniques,

where a network model of an aspect of current operation financial performance is created only after removing data associated with all enterprise growth options, and

where the elements of value are selected from the group consisting of brands, customers, employees, intellectual capital, partners, vendors, vendor relationships and combinations thereof.

86. (previously presented) The apparatus of claim 85 wherein enterprise transaction systems are selected from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

87. (previously presented) The apparatus of claim 85 where the changes by element of value further comprise value driver changes.

88. (previously presented) The apparatus of claim 85 wherein one or more aspects of current operation financial performance are optimized for a specified point in time within a sequential series of points in time.

89. (previously presented) The apparatus of claim 85 wherein a Markov Chain Monte Carlo model is used to identify the changes that will optimize one aspect of current operation financial performance, genetic algorithms are used to identify changes that will optimize one or more aspects of current operation financial performance or multi-criteria optimization models are used to identify the changes that will optimize two or more aspects of current operation financial performance.

90. (previously presented) The apparatus of claim 85 wherein a contribution of each element of value to current operation financial performance further comprises a net contribution comprised of a direct element of value contribution to financial performance and one or more impacts on other elements of value.

91. (previously presented) The apparatus of claim 85 wherein analyzing the data to create a model of current operation financial performance further comprises creating a plurality of item performance indicators and completing analyses selected from the group consisting of a value driver candidate analysis, a value driver identification analysis, a contribution summary development analysis and a component of value model development analysis.

92. (currently amended) A method for current operation optimization, comprising:
converting and integrating historical and forecast transaction data for a commercial enterprise in accordance with a common data dictionary,
using neural network models to identify one or more performance indicators for each of one or more elements of value,
identifying one or more value drivers from said indicators and defining a contribution summary for each element of value for each component of value using said value drivers,
creating a model of current operation financial performance by element and component of value using said contribution summaries, and
simulating a current operation financial performance using said model as required to identify changes by element of value that will optimize one or more aspects of current operation financial performance
where the elements of value are selected from the group consisting of brands, customers, employees, intellectual capital, partners, vendors, vendor relationships and combinations thereof, a
where a network model of an aspect of current operation financial performance is created only after removing data associated with all enterprise growth options, and
where the model of current operation financial performance supports automated analysis through computational techniques.

93. (previously presented) The method of claim 92 where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value and combinations thereof.

94. (previously presented) The method of claim 92 where the contribution summaries further comprise value drivers and combinations of value drivers and where the contribution of each element of value to current operation financial performance further comprises a direct element contribution net of an impact on other elements of value.

95. (previously presented) The method of claim 92 where enterprise related transaction data are obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet and combinations thereof.

96. (previously presented) The method of claim 92 where the components of value are selected from the group consisting of revenue, expense, capital change and combinations thereof.

97 - 103. (cancelled without prejudice)

104 - 118 (withdrawn)